

W6IFE San Bernardino Microwave Society

Newsletter W6IFE Newsletter

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W6IFE License Trustee Ed Munn **W6OYJ** 6255 Radcliffe Dr. San Diego, CA 92122 619-453-4563 edmunnn@compuserve.com

The 3 **June 1999** meeting of the SBMS will have Derek, KN6TD talk about his plans for a 10 GHz digital repeater. The SBMS meets at the American Legion Hall 1024 Main Street (south of the 91 freeway in Corona, CA at 1900 hours local time on the first Thursday of each month..

Last meeting Dick, K6HIJ had a good talk on how the polarplexer can be designed and some samples of older models. Dick covered a lot of the practical stuff on the construction of the device and some optional features one could include such as circular polarization. If you need a badge, contact Treasurer Dick Kolbly K6HIJ 26335 Community Barstow, CA 92311 760-253-2477 rkolbly@compuserve.com. 25 people present.

It was proposed that the last Saturday in July (31st) [following TRW swapmeet] be another picnic/ rig measuring event at the Costa Mesa park (Fairview Park) from 11 to 3. This will be another join SBMS and San Diego Microwave Group adventure. More details later.

Scheduling-

July 1 TBD

July 31 picnic-- antenna/rig tune up

Aug. 5 TBD

Aug. 21-22 ARRL 10 GHz and Up contest 1st half

Jeff KN6VR is looking for someone to help with a series of tech talks on transverters pieces.

Wants and Gots for Sale

Free- 4 ft fiberglass dish and radome (was on 12 GHz). Pick up in Brea Dick WB6DNX 714-529-2800

Free UT-141 cable Larry K6HLH ljohns@qnet.com

Wanted WR-42 waveguide switch Dave Glawson, WA6CGR 909-612-5888

Want 10 GHz LO brick Frank WB6CWN fk@event1.com 805-443-2902

Want Yaesu 1.2 GHz module for FT736R John KJ6HZ 714-761-0242

Want KK7B 1296 transverter pwb only or unbuilt kit or complete working unit-Jeff Fort 714-466-2066w or 714-677-0045h jfort@west.raytheon.com.

For Sale TVRO 6 ft dish fair condition, OK for 1296 to 3456, mount good condition, 3.7-4.2 GHz INA and feed, block down converter positioner, etc. Jeff Fort see above.

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Your mail label indicates your call followed by when your dues are due. Dues can be sent to the treasurer Dick Kolbly K6HIJ 26335 Community Barstow, CA 92311 760-253-2477 rkolbly@compuserve.com.

Activity reported at the May 6 SBMS meeting-- Gary, W6KVC continuing ATV work on his Wavecom units; Jim, K6ML worked on his ATV receiver; Derek, KN6TD is working on a DRO design for 10 GHz; Peter, K6PTL has a new radio; Neil, KD6PWT is working on some Wavecom ATV units; Doug, K6JEY has a new 10 w TWT for 10 GHz, a 100 mw gunn oscillator on 39 GHz, and is getting closer to having a 47 GHz rig; Mel, WA6JBD had a modulator for a 47 GHz gunn to show; Ken, WB6DTA modified his 2.3 GHz rig more; Kerry, N6IZW has some 900 MHz filters available, had an FM CW radar to demo Doppler effects on 10 GHz (a sweep generator operating at 10.2-10.4 GHz with a 0.5w power amp to two 1 ft dishes, LNA on receive dish and audio amp to indicate Doppler signals off moving objects); Ed, W6OYJ built a couple more coffee can polarplexers and updated his web page (<http://ourworld.compuserve.com/homepages/edmunnn>); Frank WB6CWN is back on 10 GHz; Bill, WA6QYR is continuing work on 60 KHz / 10 MHz frequency standard based upon RSGB design; Chuck, WA6EXV is building circuit boards for the 60 KHz/ 10 MHz frequency standard, modified some Qualcomm TCXO's for use as a VCTCXO, used ERA MMICs with feedback for stable operation at 60 KHz, designed a 60 KHz filter, has built some 2.3 GHz power amps; Dick, WB6DNX had some 2.3 GHz activity; Jeff, KN6VR figured out how to feed a dish with a polarplexer; Dave, WB6CGR has a new 1296 amplifier design.

The MSF Locked Frequency Reference. Bill, WA6QYR and Chuck, WA6EXV have been talking about the slow progress they have been making on a 10 MHz in the shack reference oscillator. The idea is to lock a local oscillator to a very stable and accurate external source, similar to the one that appeared in July 1998 QST which used signals from a GPS receiver. This way you have a local oscillator with the accuracy of the atomic standards costing thousands of dollars. Bill's plan came from Peter Day, G3PHO's web page which had some home-brew test equipment. Peter had used an article out of the April 1994 Radio Communications Magazine (the RSGB publication similar to ARRL QST) by Andy Talbot, G4JNT. The original article is for a 12 MHz oscillator locked to the British MSF 60 KHz signal like WWVB. Later mods came up with a shack standard 10 MHz oscillator locked to MSF. This would be handy for running a counter or checking a counter that could be accurate to better than 1010 or 1 Hz at 10 GHz. Phil, W6HCC had some antenna ideas-- a multturn resonated loop with a single turn link that was about 5 ft on a side. Bill has a triangle and Chuck has a square that work just fine. Since we have a 100 KHz Loran transmitter a few hundred miles away and WWVB is 750 miles away we have to have a few more amplifiers and filters than G3PHO. MMICs have too much unstable gain at 60 KHz so Chuck's design

has evolved to transistor amplifiers, opamps, and ICs. Modified Qualcomm TCXOs are used for the local reference oscillator. Chuck finally has a working model. More later when the electrons settle out. Bill

73's Bill, WA6QYR